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May 16, 2018

House Natural Resources Committee

Lansing, Michigan

RE: Composting Council of Michigan

Good Morning Chairman Howell and fellow members of the committee. My name is Bill Whitley, with Spurt Industries and I am joined by Cliff Walkington with Hammond Farms.

We are here today on behalf of the Compost Council of Michigan, where I serve as President. The Compost Council of Michigan represents public and private composters across the state. We also count equipment manufacturers and large compost users among our membership.

I also represent the compost industry on the Governors Solid Waste & Recycling Advisors Group and the executive committee of the Michigan Organics Council, a subset of the Michigan Recycling Coalition.

In between all of that, I own & operate Spurt Industries, a commercial composting business, with operations in Wixom, Zeeland & Muskegon. My three sites combined are 45 acres and I process about 200,000 cubic yards annually.

Our goal today is to give you some insight into what composting is and how we benefit the State of Michigan both environmentally and economically.

When I entered the industry, I struggled to explain to people what I was doing now. As I tried to capture the concept of what we do, it clicked for me one day when my son came home from Kindergarden telling me that he learned about the water cycle. If you remember the water cycle; water falls as rain, runs into a stream, into a river, into a lake, into the ocean where it evaporates, becomes a cloud and then rain again. Composting is the nutrient cycle. In the forest, a tree grows. All of the nutrients required to grow the tree come from the soil. When the tree dies, it falls in place, decomposes and becomes the source of healthy soil for the next generation of plant life.

Today, a tree grows. The apple is picked from the tree and taken far away as food. The nutrients that this apple is made of, came from the soil. And must be replenished if we wish to continue to grow food on this same land.

There are two common ways to replenish the soil. One method is the use of synthesized chemical fertilizers. And the other is through composting. Composters capture the organics from our waste stream and using highly specialized equipment and carefully controlled processes – accelerate the natural breakdown to manufacture a high quality finished compost which is then used to create healthy soils for the next generation of plant life.

The composting industry was kick started when legislation requiring that yard waste be composted instead of going to the landfill went into effect in 1994. Since that time there has been significant growth and evolution in our industry. We bumped our heads along the way. First we had to learn how

to make good compost, and to be good neighbors. We figured that out, and began producing good compost – but we had to educate consumers and create markets for our finished product. We have done that – and each of us now are selling all of the compost that we produce. The US Composting Council has developed certification programs for Operations Managers and for finished product. Many of the members of the Compost Council of Michigan produce a certified product today, and an Operations Manager training course will be held in East Lansing later this summer. Since the yard waste ban was passed, there have been attempts by landfill supporters to repeal the ban, and as industry we thank you for your continued support. I hope that what you hear today will help you to see that burying this valuable organic resource in a landfill is not in our best interest.

We are here representing a growing and significant industry. Research conducted by the Michigan Recycling Coalition, on a grant from the MDEQ, of the municipal solid waste stream shows that composting is the second largest recycled waste stream in the state. Paper is number one and then Compost. Glass, Plastics and Metals round out 3, 4 & 5.

Composting is critical to the achievement of Michigan's recycling goals. The same MRC report finds that overall Michigan recycles only 15% of its municipal solid waste stream, and the governor has set a goal to double that to 30% -- while the current national rate is 35%. Waste characterizations studies conducted by the EPA find that nearly 50% of the municipal waste stream is compostable. There is no way for Michigan to reach our 30% goal without a strong composting industry.

Composting is a job creating industry. Research conducted the Institute for Local Self Reliance finds that composting organic waste produces twice as many jobs as landfilling the same material and four times as many jobs as incineration — and this is only in the processing of the material. Based upon ILSR benchmarks and DEQ volume reports, the downstream usage of finished compost is responsible for an additional nearly 1,000 jobs across the state.

While some other recycling industries are facing new market challenges, the problems they face are not seen by the composting industry due to some unique advantages to our process. Traditional recyclables – cardboard, glass, plastics, metals - go into one bin and must later be separated for processing. First metals from plastics from glass. Then steel from aluminum. Polyester from polyethylene. And so on. The markets for many of these recyclables do not exist locally, and material is frequently shipped to China for processing & manufacturing. Fuel costs, international market disruption, tariffs and China's Green Sword efforts have challenged these markets. In composting, all organics are mixed together for processing and our end product markets are entirely local. One hundred percent of my products are sold and used within the state of Michigan, giving us more security in our markets.

With that overview of what composting is, and where we fit into the recycling picture within the State, I will turn it over to Cliff to expand on what compost does, how it is made, and where it is used. Cliff,

Good morning. My name is Cliff Walkington. I am the General Manager of Hammond Farms, based here in the Lansing area. We are a state registered commercial compost facility, a food scrap hauler and a four location landscape supply business, specializing in the production of custom soil blends and mulches. We process about 50,000 cy of yard trimmings and organics a year, including a good portion of the curbside yard waste generated by City of Lansing residents. We haul and compost almost 15,000 cy of food scraps for our customers across southern lower Michigan and have recently invested over two

million dollars in specialty equipment to expand our composting business. This investment demonstrates a commitment to this industry as well as our belief that there is a future in composting!

I'm going to expand on a couple of things that Bill mentioned, beginning with what compost does. While compost absolutely provides nutrients for plants, I believe its primary function is as a soil amendment. It improves the soil's ability to manage moisture. It loosens compacted soils and allows the soil to hold and releases nutrients slowly and it adds valuable organic matter. In short, it makes the soil healthy. And people are beginning to understand its benefits, which is why most of us compost producers in Michigan sell everything we make. We have a waiting list for our product at Hammond Farms right now!

Bill talked a little about what materials can be composted. Leaves, grass clippings and ground brush immediately come to mind, but in recent years, food scraps, paper products and compostable products like these <flatware, plates and cup>have been created. All of these are plant based and will break down completely in a commercial composting facility. Think of how much material cafeterias and food courts could divert from the waste stream with these products!

What is commercial composting? The process is pretty fascinating really. Once material is ground <picture> and the specific recipe is mixed the material is placed in windrows <picture>where it is turned <picture>until it is composted. Naturally occurring temperatures in these windrows range from 140 to 160 degrees, killing weed seeds and pathogens. Once the material has stopped heating, it is screened, allowed to cure and then can be used. <Samples>

So who uses this stuff? Aside from backyard gardeners, landscape contractors use it in topsoil blends for lawns and plant beds, turf specialists use it when maintaining and rejuvenating ball fields and golf courses and growers use it in their soil blends...the flowers in front of you were grown from seed in a compost blend. Rain garden and bio swale mixes, which retain and filter stormwater are being required in many new developments and feature compost as well. One of the largest single consumers of compost in Michigan is Scott's, who purchase, blend and bag tens of thousands of tons of compost every yea. All of the users I have mentioned are helping to recycle and reuse material that used to be considered waste.

What does the future of composting hold? We believe that as long as composting organics is encouraged by policy makers, there will continue to be tremendous growth in our industry. We believe that there are still substantial volumes of organics that for one reason or another are not presently being composted. There is no shortage of demand for good compost now and many markets (like agriculture) are still under developed. We think this adds up to a bright future in composting.

I hope that gives you a quick understanding of what composting is, and how compost is used today. Before we close, I'd like to give you a window into two areas where compost can provide outstanding benefits to the state in the years to come.

The first has to do with child lead poisoning.

Last month the Department of Health & Human Services released their report on elevated lead levels in the bloodstream of Michigan children. Three Michigan counties were found to have more than 6% of children with elevated lead, while in Highland Park 1 in 7 children had elevated levels. Lead exposure in children has been found to lower IQ and to cause both learning and behavioral issues. There are even studies which tie elevated lead levels to increased crime rates. One of the primary sources of lead exposure is soil contaminated with lead paint from homes or residuals from leaded gasoline. Kids play in the dirt outside their homes, and often ingest some while playing or do not wash their hands thoroughly before coming in for a snack and the lead is then absorbed into the blood stream. Research conducted by the University of Washington finds that the application of specific composts can significantly reduce the bioavailability of this lead – thus limiting lead absorption into the blood stream. Compost can be a significant piece of addressing this lead issue effecting our next generation.

And finally, a significant economic issue which our state is facing. We all know that the largest industry in the state is the auto industry. But how many know what the second largest industry is? It's not composting. It's tourism. And with the significant research that's been done on the Pure Michigan campaign, we know with a high level of confidence how many people are coming to Michigan, and more importantly why they choose to come to Michigan instead of going somewhere else. And overwhelmingly the reason that people come to Michigan has to do with our lakes. People travel here to swim, fish, canoe, sail, and enjoy our beaches. And each day our lakes come under greater threat from the algae blooms which are caused primarily by excessive fertilizer runoff. In Ohio this problem has become so severe that it has gone beyond closed beaches to having caused interruptions in the availability of drinking water in the city of Toledo, and the State of Ohio has committed \$3 BILLION dollars to address the algae bloom issue. We need to be careful not to allow ourselves to end up in a similar situation.

In the mid 1990's, in the Puget Sound watershed in NW Washington State, excessive development had changed the characteristics of the stormwater running into their streams to the point that the salmon were not spawning as they used to – which posed a significant threat to their local economy. Significant amounts of research were conducted as to the causes and it was ultimately determined that the application of compost could reverse this condition. They developed a program called 'Soils for Salmon' and instituted best management practices which included the application of compost to achieve a 5% organic matter content in the soil and were able to reverse the pollution in the streams and save their salmon population. We in Michigan should learn from the successes in Washington and challenges in Ohio and mirror this program in our own way – just as they developed 'Soils for Salmon' we must 'Landscape for the Lakes' to protect our second largest industry before it's too late.

I hope that this has helped you to understand more deeply our composting industry and the important role we can play in the state. Thank you for the time today, for your support to date, and for your continued support on composting related issues in the future. Thank you.